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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/656,894 | 09/07/2000 | Alex Krister Raith | 4015-677 | 2214 |
| 24112 | 7590 | 05/21/2004 | EXAMINER | |
| COATS & BENNETT, PLLC P O BOX 5 RALEIGH, NC 27602 | | | NGUYEN, LEE | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2682 | 15 |

DATE MAILED: 05/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/656,894

Applicant(s)

RAITH, ALEX KRISTER

Examiner

LEE NGUYEN

Art Unit

2682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12 and 29-33 is/are allowed.
- 6) ☒ Claim(s) 13-21, 23-26, 28 and 34 is/are rejected.
- 7) ☒ Claim(s) 22, 27 and 35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to the communication filed 3/11/2004.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 13-18, 23-24, 28, 34 and 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yen (cited in the previous action).

Regarding claim 13, Yen teaches a method of initiating a search for a control channel in a communications network by a mobile terminal, said method comprising: storing at least one reference position indicative of the location of said communications network in said mobile terminal ([0033], (x1,y1)); determining the current position of said mobile terminal ([0035], (x2,y2)); computing the distance of said current position of said mobile terminal from said reference position ([0035]-[0036]); and initiating a search

for a channel based on said distance between said mobile terminal and said communication network ([0036]). Yen fails to teach that the reference position is a central point of the communication network. However, as shown in the limitation of new independent claims 36 and 37, the reference positions could alternately be the boundary of the communication network. In other word, the reference positions can be flexibly changed according to the system designers, and it is obvious to a skilled artisan because it is not critical to the claimed invention. It would have been obvious to one of ordinary skill in the art at the time the invention was made to also include the central point as claimed into the communication network of Yen so that different network topologies can be covered.

Regarding claim 14, Yen also teaches establishing communication between said and said mobile terminal and said communication network ([0032]).

Regarding claim 18, Yen also teaches using GPS ([0035]).

Regarding claim 23, Yen teaches a mobile terminal comprising: a transceiver 116 (fig. 1) transmitting and receiving signals over a wireless channel; memory 104 storing at least one reference position indicative of the location of a communications network ([0033], (x1,y1)); a position

estimator 114 to determine a current position of said mobile terminal ([0035], (x2,y2)); and control logic 102 including a processor to calculate the distance of said mobile terminal from said reference position based on said current position of said mobile terminal (([0035]-[0036]) and to initiate a search for a channel based on said calculated distance (([0036])). Yen fails to teach that the reference position is a central point of the communication network. However, as shown in the limitation of new independent claims 36 and 37, the reference positions could alternately be the boundary of the communication network. In other word, the reference positions can be flexibly changed according to the system designers, and it is obvious to a skilled artisan because it is not critical to the claimed invention. It would have been obvious to one of ordinary skill in the art at the time the invention was made to also include the central point as claimed into the communication network of Yen so that different network topologies can be covered.

Regarding claim 24, Yen also teaches using GPS receiver 114 ([0035]).

Regarding claim 34, Yen teaches a method of controlling the initiation of a search by a mobile terminal for a channel associated with a

radiocommunication system comprising: repeatedly determining the location of the mobile terminal with respect to a reference position associated with the radio communication system (col. 4, [0034] through [0038]); and initiating a search for a channel associated with said radio communication system if the computed distance between the mobile terminal and the reference position is less than a predetermined distance, see [0035] and [0036]. Yen fails to teach that the reference position is a central point of the communication network. However, as shown in the limitation of new independent claims 36 and 37, the reference positions could alternately be the boundary of the communication network. In other word, the reference positions can be flexibly changed according to the system designers, and it is obvious to a skilled artisan because it is not critical to the claimed invention. It would have been obvious to one of ordinary skill in the art at the time the invention was made to also include the central point as claimed into the communication network of Yen so that different network topologies can be covered.

Regarding claims 15-17, Yen as modified fails to teach a private wireless telephone system including short-range communication Bluetooth. It is taken official notice that the art using dual mode mobile terminal is

conventionally well known. It would have been obvious to one of ordinary skilled in art at the time the invention was made to also include dual mode mobile terminal, which uses the private wireless system to the system of Yen in order to enhance the operability of the mobile terminal.

Regarding claim 28, the claim is interpreted and rejected for the same reason as set forth in claims 15-16.

Regarding claims 36-37, the claims are interpreted and rejected for the same reason as set forth in claim 13.

3. Claims 19-21 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yen in view of Yee cited in the previous action.

Regarding claims 19-21 and 25-26, Yen fails to teach determining said current position of said mobile terminal is repeated at intervals dependant on said distance of said current position of said mobile terminal from said reference position and rate of change. This technique is described by Yee in col. 8, lines 55-63 (sleep interval, increase, decrease). It would have bee obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Yee to the system of Yen in order to reduce power consumption.

Allowable Subject Matter

4. Claims 1-12, 29-33 are allowed.
5. Claims 22, 27, and 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 22, 27 and 35 were allowed.

Response to Arguments

6. Applicant's arguments filed 3/11/2004 have been fully considered but they are not persuasive.

Regarding the rejection of independent claims 13, 23 and 34, Applicant contends that Yen fails to teach that the reference position indicates a central point.

In response, as disclosed by Applicant in the specification page 18, lines 7-13, the format of the location information may take various forms as known in the art. Therefore, taking the central point as the reference position is non-critical and obvious to one of ordinary skill.

The argument concerning the rejection of claim 29 is moot in view of allowance.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEE NGUYEN whose telephone

number is (703)-308-5249. The examiner can normally be reached on 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, VIVIAN CHIN can be reached on (703) 308-6739.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 5/19/04
LEE NGUYEN
Primary Examiner
Art Unit 2682